re: Transponder Continuous Operation: Instead of considering an expensive hardware solution, (engineering and designing and installation of a switch involving, transponder over-ride, on-ground sensing etc.), it may be beneficial for all applicable aircrew operating IFR to be issued (by ATC) a random, discreet and not readily discernable "Hijack Code" that is issued along with their Clearance and is valid only for the flight sector associated with their clearance. Most part 121 aircraft have two transponders. This single-trip-use "Hijack Code" could be entered into the second standby transponder upon initial receipt of the IFR clearance and be available at the flick of a switch between transponders.

If concerns about interception of the "Hijack Code" are an issue during VHF transmission of clearances, then a futher precaution could be taken to make the "Hijack Code" a function of the PIC pilot licence number or tail number of the aircraft.

At issue here is to avoid having a valid precaution that will hopefully be rarely called upon, become something that is a complex and costly hardware/engineering/installation solution and/or become a complex and error-prone procedure for aircrews to follow.

Keep it simple, but it's time to move beyond the single existing "Hijack Code" that is widely known by aircrews and hijackers alike.